

Review of Draft Order No. R8-2014-0002: Orange County Municipal Separate Storm Sewer System Permit

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Review Modules

1. Introduction
2. Findings/Technical Report
3. General Responsibilities
4. Discharge Prohibitions & Receiving Water Limitations
5. Implementation Agreement, Legal Authority, and Enforcement
6. Illicit Discharges, Illicit Connections, Illegal Dumping; Litter, Debris, and Trash Control
7. Municipal Inspection Programs
8. New Development
9. Public Education and Outreach
10. Municipal Facilities/Activities and Construction
11. Training Programs and Notification Requirements
12. Total Maximum Daily Loads (Water Quality Monitoring)
13. Program Effectiveness Assessment (Program Monitoring)
14. Fiscal Analysis, Provisions, Permit Modification
15. Permit Expiration and Renewal; Standard Provisions

Regulatory Background

- MS4 Permit program originated in 1987 Clean Water Act Amendments → Section 402(p)
 - USEPA regulations: 40 CFR Parts 122, 123, and 124
- MS4 Permit program regulates discharges of “urban runoff” from the municipal separate storm sewer system.
- When final, Order R8-2014-0002 will be the fifth-term OC MS4 Permit
- OC MS4 Permit program almost 25 years old
- MS4 Permit program relies on an “iterative” approach to compliance vs. strict compliance with numeric effluent limitations

Development Strategy

- Evolution of the OC MS₄ Permits.
- Incorporate key elements of the Co-permittees' storm water programs into the language of the Permit.
 - Enforce the permit language instead of language in program plans.
- Re-focus on the “iterative process”.
 - Improve the flexibility of program planning.
 - Minimize complexity in planning.
 - Promote innovation.

Development Strategy

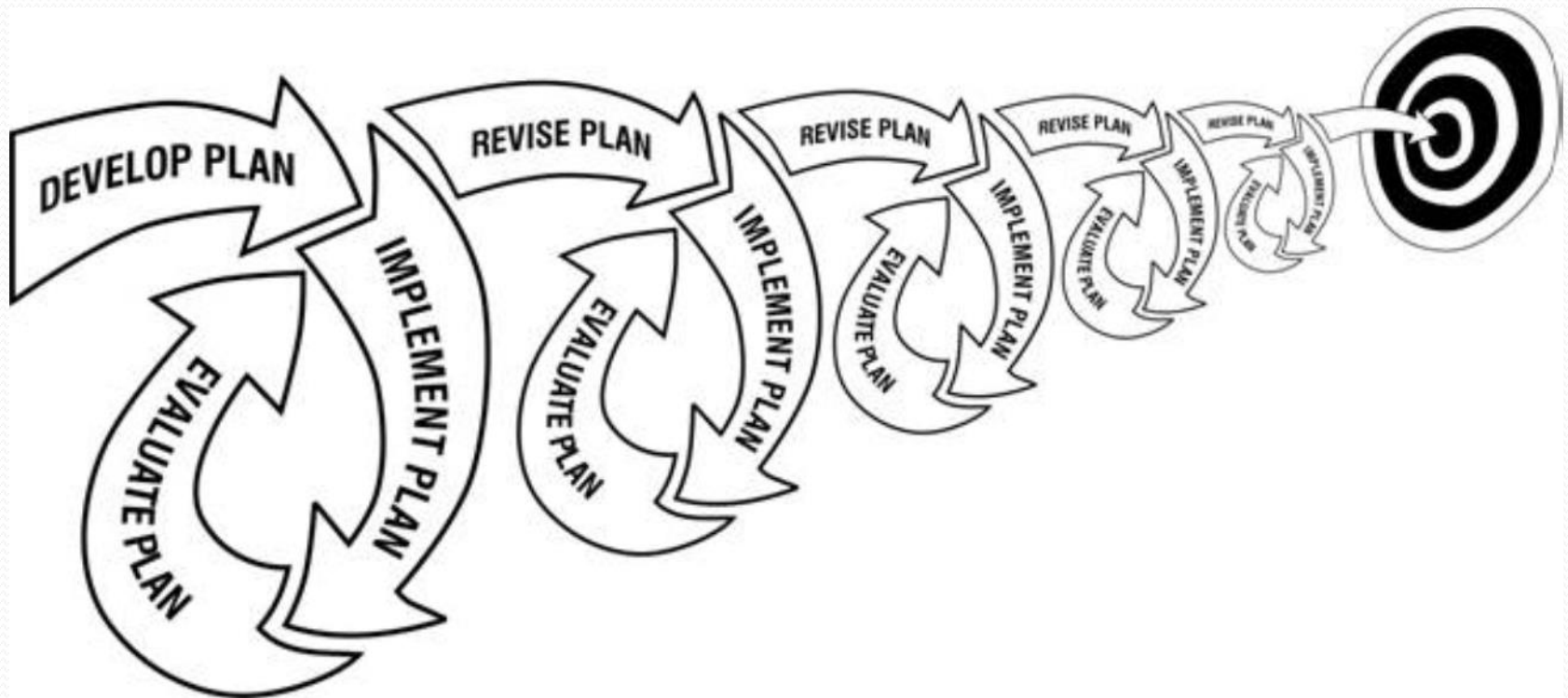


Image source: EPA, 2008, Evaluating the Effectiveness of Municipal Stormwater Programs, EPA 833-F-07-010

Development Strategy

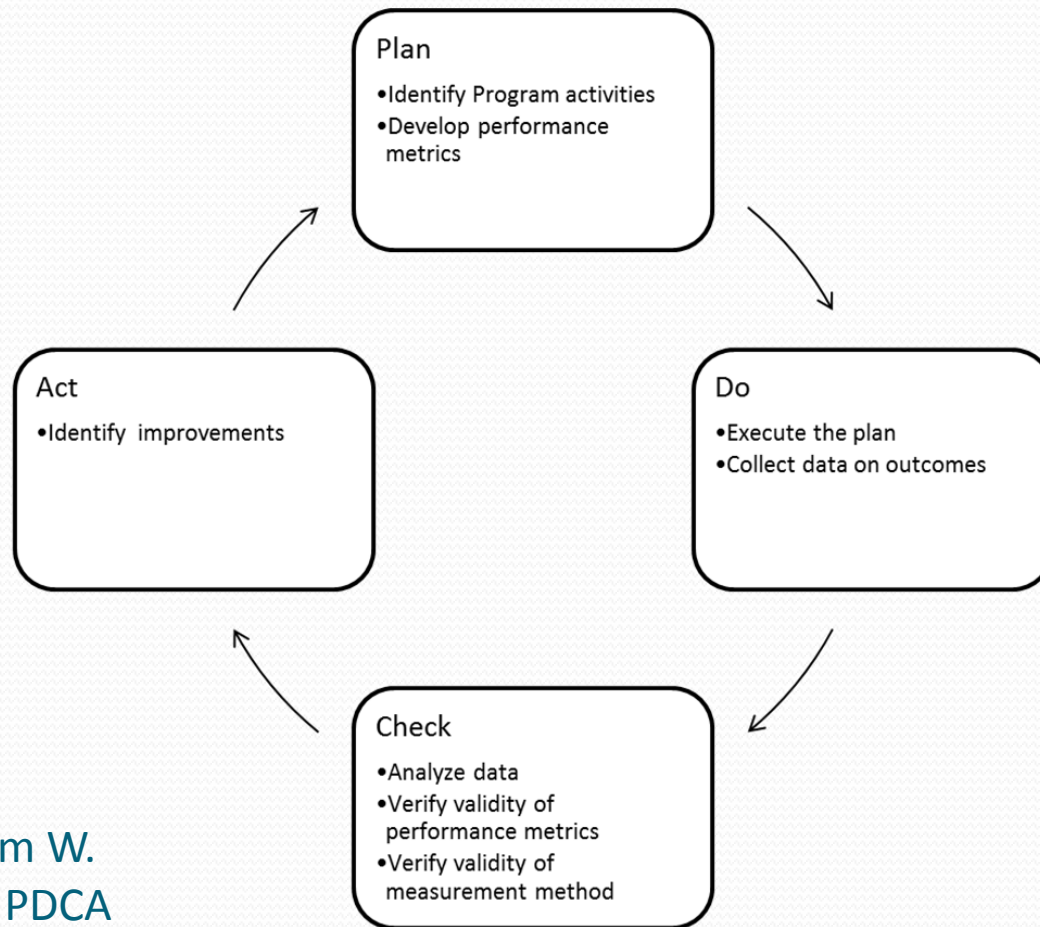


Figure adapted from W. Edwards Deming's PDCA Cycle

Overview of Permit Contents

- General layout has been updated for better consistency with State Board template.
- Technical Report, table of contents, glossary, etc. have been added.
- Most objective Permit requirements have been retained (e.g. 10 million public education impressions).
- Organization within the Permit body is mostly retained.
- Permit body language is succinct; “plain language” used where practical; discussion found in the Technical Report.
- TMDL WLAs and requirements are in Appendices; instructive requirements are in the Permit body.

Overview of Findings

- Findings incorporate the Technical Report
- Technical Report is functionally the “Fact Sheet”
- Findings have been shortened with more detailed information in the Technical Report.
- Features of the Findings:
 - Continues to acknowledge limits of Co-permittees’ authority.
 - Clarifies difference between in-stream structural treatment controls and other types of stream modifications.
 - Stream modifications are regulated under the dredge/fill program
 - In-stream structural treatment controls and waters of the U.S. have mutually exclusive purposes.

Overview (cont'd)

- Continues to acknowledge necessity of “iterative process” and achievement of water quality standards over the long-term.
- Commits to use of voluntary performance metrics that are not subject to enforcement.

Overview of Technical Report

- Summarizes some of the lessons learned during the permit term, including the performance of 14 audits.
 - Incorporation by reference may be stifling innovation.
 - Incorporation by reference provides disincentive to fully document storm water programs.
 - There is a need for a comprehensive set of performance metrics.
- Provides a general explanation of Permit requirements.
- Provides explanations of specific Sections of the Permit.
- Explanations will be presented during the other Modules.

Section I: General Responsibilities of the Co-permittees

- Section I responsibilities apply to all Co-permittees, including the Principal Permittee.
- Based primarily on the “iterative process”.
- Includes “iterative process” requirements to:
 - Accurately document and effectively implement BMPs.
 - Develop and apply performance measures.
 - Execute program improvements.
 - Evaluate validity of performance measures/methods of measurement.
- Process requirements are reinforced by PEA requirements in Section XIX and elsewhere.

Section I: General Responsibilities of the Co-permittees (cont'd)

- Continues previous requirements for internal and external coordination.
- Adds requirements to “maintain records and submit reports that are adequate to determine compliance”.

Section II: General Responsibilities of the Principal Permittee

- No new duties are intended to be assigned.
- Assigns responsibilities to coordinate and execute common programs, policies, procedures, and strategies.
- Assigns responsibilities to monitor and report.
- Assigns responsibilities to coordinate preparation of written reports, programs, plans, and procedures.

Section III: Discharge Prohibitions and Limitations

- Requires that non-storm water discharges be “effectively prohibited” unless:
 - Subjected to an NPDES permit.
 - Listed in Table 2
 - CERCLA discharges were added.
 - Table 2 can be modified by the Executive Officer
- Other prohibitions and limitations from the current permit are continued.

Section IV: Receiving Water Limitations

- Requires that water quality standards in receiving waters be maintained unless a draft plan for compliance is submitted/prepared or, if final, is being fully implemented.
 - Plan may be submitted voluntarily or required by the Executive Officer; 6-month and 90-day deadlines respectively.
 - Requires revisions to the draft within 60-days.
 - If a TMDL applies, TMDL plan requirements satisfy these requirements.
- Incorporates Special Protections in Attachment B to Resolution No. 2012-0012.
 - Protects Newport Coast and Crystal Cove ASBS
 - Applies only to City of Newport Beach.

Section V: Implementation Agreement

- “Co-permittees must execute inter-agency and inter-Co-permittee agreements necessary to satisfy the requirements of this Order.”
- These agreements already exist but may require revisions to comply with the Order.

Section VI: Legal Authority and Enforcement

- Continues requirements for legal authority.
- Adds requirements to expressly track and evaluate challenges to authority.
- Continues requirements for progressive enforcement.
 - Each co-permittee must have their own formal written program.
 - A single shared guidance document is not sufficient.

Section VII: Illicit Discharges, Illicit Connections, Illegal Dumping; Litter, Debris, and Trash Control

- Repeats requirement to “effectively prohibit” illicit discharges and illicit connections.
- Continues requirement for public reporting.
- Adds requirement for advertised methods for legitimate disposal of wastes with “potential to be illicitly discharged”.
- Continues requirements for illicit discharge/connection detection program (including SSOs).
 - Adds more detailed requirements based on the Co-permittees’ existing program.

Section VII: Illicit Discharges, Illicit Connections, Illegal Dumping; Litter, Debris, and Trash Control (cont'd)

- Continues requirement for trash and debris program.
- Adds program for 'formal evaluation' of trash and debris technology.
 - Does not mean a technology performance program.
 - Evaluation can be subjective and based on practicable factors.

Section VIII: Municipal Inspections of Construction Sites

- Construction site inspection requirements are continued with no change to frequency.
- Inspections are narrowed to sites with expected or actual construction duration of 2 weeks.
 - Sites may begin and end without exposure to storm water
 - Staff may not have a chance to inspect.

Section IX: Municipal Inspections of Industrial Sites

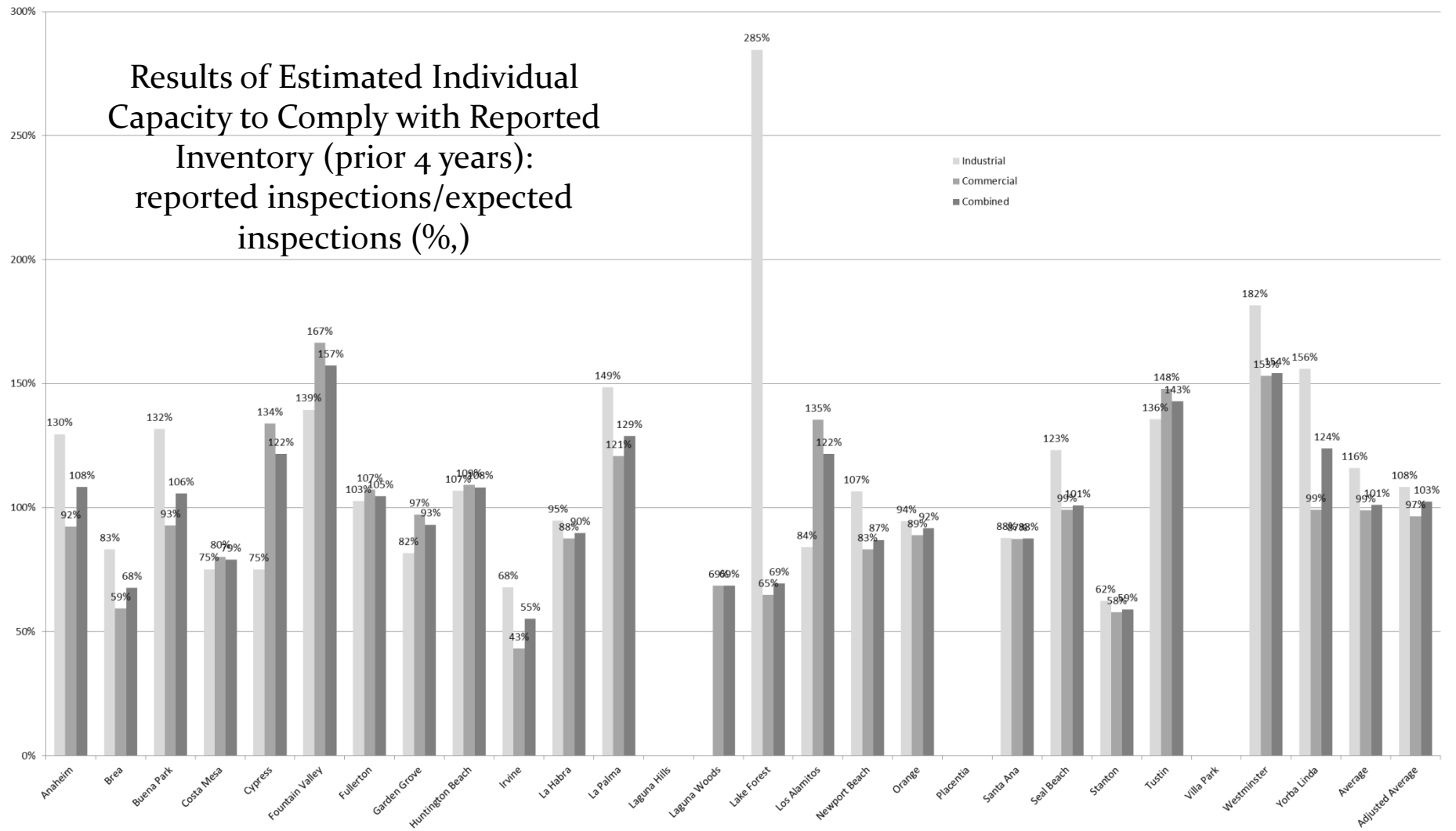
- Industrial site inspection requirements are continued with no change to frequency.
- Inspection method is not dictated: personal visits or inspections from car as appropriate.
- Regional Board staff inspections can serve in place of a Co-permittee's inspection.

Section X: Municipal Inspections of Commercial Sites

- Commercial Inventory has been modified slightly in response to Co-permittees' request.
 - Plastics manufacturers are in “industrial” inventory
 - Transportation services has been added.
- Inspection frequency is continued.
- Prescribed distribution was 10%; 20%; 70%
- Proposed: 5%; 15%; 80% (Pareto distribution: 80-20 Rule).
 - Provides approximately 16% reduction in expected commercial inspections/100 sites.
 - Expected to benefit 9 Co-permittees (16 don't need help); 40% reduction would benefit 13
 - Would not help 7; with 40% reduction would not help 3

Module 1: Municipal Inspection Programs

Results of Estimated Individual Capacity to Comply with Reported Inventory (prior 4 years):
reported inspections/expected inspections (%),



Module 2

Section XI: Residential Program

- Is now incorporated into Public Education.
- HOA's and similar organizations are part of the target or general audiences.

Section XII: New Development

- This section was heavily re-written and incorporates key elements of the Co-permittees' 2011 Model WQMP and Technical Guidance Document.
- Although major editorial changes from previous permit, the re-write mostly reflects a change in how enforcement will occur.
- propose that key elements are directly enforceable in the draft permit.
- The requirements map the process already described; adds requirements to address deficiencies found during audits.
- Certain “guidance” is will be mandatory.

Section XII: New Development (cont'd)

- Significant changes
 - On-site infeasibility does not need to be demonstrated if a qualified off-site structural treatment control is available.
 - Types of structural treatment controls are broken into defined categories with specific requirements.
 - Hierarchy of BMP selection is continued but for LID BMPs, off-site or on-site is less important.
 - By default BMPs must be on-site; except under a set of conditions, structural controls can be off-site.
 - Most conditions do not require demonstrating that on-site is infeasible.

Section XII: New Development (cont'd)

- Significant changes (cont'd)
 - Non-priority project plans now only required if the non-priority project “includes modifications or improvements that are, or affect areas that are exposed to storm water or which may be sources of urban runoff”.
 - Non-priority projects may be required to use eligible off-site structural treatment control.
 - Waivers of structural treatment controls must be approved.

Section XIII: Public Education and Outreach

- General Audience
 - 10 Million impressions
 - School-age and up
- Target Audience
 - Subject to high-priority runoff issues campaign: 3 issues/watershed
 - Discretion in selecting issues for each watershed; can be same or different.
- Methodology must be well-described in a written program.
- Public input required.

Section XIV: Municipal Facilities

- Continues requirements from previous permit.
- Adds requirements for closer tracking of pollutants removed from drainage systems.
- Adds requirements for SOPs for field activities.
- Adds specific requirements to implement Integrated Pest Management, Pesticide and Fertilizer Guidelines with corresponding annual audits.

Section XV: Municipal Construction Projects and Activities

- Continues requirements to comply with State Board's Construction General Permit.
- Amplifies that the MS4 Permit prevails on post-construction best management practices.
- Co-permittees expected to continue to use SMARTS.

Module 3

Section XVI: Training Programs

- Personnel subject to training is expanded to include “staff, contractors and vendors whose duties or responsibilities directly or indirectly affect the Co-permittee’s capacity to satisfy the requirements” of the Permit.
- Specifies training minimum training content.
- Requires tracking and demonstrated expertise and competence
- Training is transferrable
- Training every two years instead of annually.

Section XVII: Notification Requirements

- Continues routine quarterly notification requirements and “imminent threat” notification requirements.
- Clarifies notification content and deadlines.

Section XVIII: Total Maximum Daily Load Implementation

- Waste Load Allocations and other requirements are located in Appendices B through H.
- Draft Order requires compliance with WLAs or to be in process of developing or implementing a plan for compliance.
 - Default is compliance with WLAs if plan is not being developed or a final plan is not being implemented.
 - Co-permittees have 50 days to begin developing/implementing a plan: starts with written notice and additional milestones are established.
 - Plan development is voluntary but Co-permittees must weigh risk of non-compliance.
 - Compliance is determined at “designated monitoring locations”.

Section XVIII: Total Maximum Daily Load Implementation (cont'd)

- WLA compliance determinations are supported by requirements in the Monitoring and Reporting Program
 - Water Quality Monitoring Plan
 - Expressed requirements for processes for determining compliance subject to conditions.
 - Mandates cycles of monitoring, analysis, and reporting.
 - Creates a mechanism to discover and report compliance or non-compliance at certain time scales.

Module 5

Section XIX: Program Effectiveness Assessments

- Essentially requires reporting based on the “iterative process” described earlier.
 - Each Co-permittee must perform the PEA; Principal Permittee compiles information
 - Components of PEA follows the components of the “iterative process”
 - Planning component requires conceptual models of the pollution processes to guide the program.
 - Must develop voluntary performance standard for interventions within the pollution processes.
 - Must employ voluntary and prescribed performance standards for the assessments.

Section XX: Fiscal Analysis

- Reorganized to make it clear that the analysis is to include previous, current, and next fiscal year information.
- Adds new requirement to conform to reporting guidance from USEPA when available.
 - Origin is in GAO reports noting problems from inconsistent methods.

Section XXI: Provisions (Monitoring)

- Largely continued from the current permit.
- Establishes Monitoring and Reporting Provisions as being requirements of the Order.
 - Includes Program Effectiveness reporting requirements and Water Quality Monitoring
 - Includes requirements for the development of a new Water Quality Monitoring Program at a later time
 - In interim, water quality monitoring program as reported must be continued.

Section XXII: Permit Modification

- Describes some of the conditions where the Permit may be modified (e.g. TMDL changes/Basin Plan changes).

Section XXIII: Permit Expiration and Renewal

- Establishes that Order No. R8-2009-0030 is withdrawn.
 - Provisions can continue to be enforced for violations that occurred during its term.
- Establishes that the new Order will become effective 50-days after adoption.
- Establishes the expiration date of the new Order: 5-years from date of adoption of previous Order.
 - New Order will be expired, except for enforcement purposes, same as previous permit versions.
 - All Orders can be administratively extended so long as Co-permittees submit ROWD.

Section XXIV: Standard Provisions

- Standard provisions originate from 40 CFR 122.41, 122.42, 122.44, and State Board guidance.
- Includes more technical details on sampling requirements.
- Includes certification statement requirement for submittals.
- Inspection/entry requirements.

